

JRC TECHNICAL REPORTS

Methodology for the assessment of compliance with knowledge sharing requirements for NER 300 projects

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1 Introduction

NER 300 is an EU funding programme for the demonstration of carbon capture and storage (CCS) and innovative renewable energy (RES) technologies at the pre-commercial stage. The aim of NER 300 is to establish a demonstration programme comprising the best possible CCS and RES projects and involving the Member States. The programme intends to support a wide range of CCS technologies (pre-combustion, post-combustion, oxyfuel, and industrial applications) and RES technologies (bioenergy, concentrated solar power, photovoltaics, geothermal, wind, ocean, hydropower, and smart grids). NER 300 also seeks to leverage a considerable amount of private investment and/or national co-funding across the EU, boost the deployment of innovative low-carbon technologies and stimulate the creation of jobs in those technologies within the EU.

NER 300 is funded from the sale of emission allowances from the new entrants' reserve (NER) set up for the third phase of the EU emissions trading system (EU ETS). 300 million allowances are reserved for the financing of commercial-scale CCS and innovative RES demonstration projects according to Art. 10a(8) of the EU ETS Directive.¹

The funds from the sales are to be distributed to projects selected through two rounds of calls for proposals, covering 200 and 100 million allowances respectively. Decision 2010/670/EU lays down the criteria and measures for the financing of NER 300 projects (NER 300 Decision).² The first call was launched on 9 November 2010 and the award decision was adopted on 18 December 2012³ with an amendment on 31 January 2014⁴. Total awards are worth about 1.2 billion EUR. 22 innovative RES projects from 15 technology sub-categories across 15 Member States are funded. No CCS projects have been awarded funding.

Knowledge sharing requirements are built into the legal basis of the programme as a critical tool to lower risks in bridging the transition to large-scale production of innovative renewable energy and CCS deployment. The legal basis obliges project sponsors to submit annually to the European Commission relevant knowledge (RK) gained during that year in the implementation of their project (see Annex 2 and 3 of the Award Decision³). The knowledge sharing element of NER 300 requires the European Commission to collect and assess the relevant knowledge with a view to establishing whether the project has adequately complied with its knowledge sharing obligations. The disbursement of annual payments is conditional to the positive opinion of the Commission on the fulfilment of the KS obligation.

DG CLIMA is in charge of managing the NER 300 programme for the European Commission. The Institute for Energy and Transport (IET) of the Joint Research Centre (JRC) supports DG CLIMA in the implementation of the knowledge sharing from 1 December 2013 to 31 December 2016 under the Administrative Arrangement 071201/2013/666129/CLIMA.C.1.

The purpose of Task 1 of the Work Package 1 (Assessment) of the Administrative Arrangement is to develop a methodology for the assessment of knowledge sharing obligations. This report presents the outline of the methodology developed.

¹ Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emissions allowance trading scheme of the Community

² Commission Decision of 3 November 2010 laying down criteria and measures for the financing of commercial demonstration projects that aim at the environmentally safe capture and geological storage of CO₂ as well as demonstration projects of innovative renewable energy technologies under the scheme for greenhouse gas emission allowance trading within the Community established by Directive 2003/87/EC of the European Parliament and of the Council

³ Commission Implementing Decision of 18 December 2012. Award Decision under the first call for proposals of the NER300 funding programme. C(2012) 9432

⁴ Commission Implementing Decision of 31 January 2014 amending Commission Implementing Decision C(2012) 9432 so as to modify the Award Decision under the first call for proposals of the NER300 funding programme. C(2014) 383

2 Processes

Figure 1 gives an overview of the main processes to collect and assess relevant knowledge. In the following sections, procedures and available templates are described in detail.

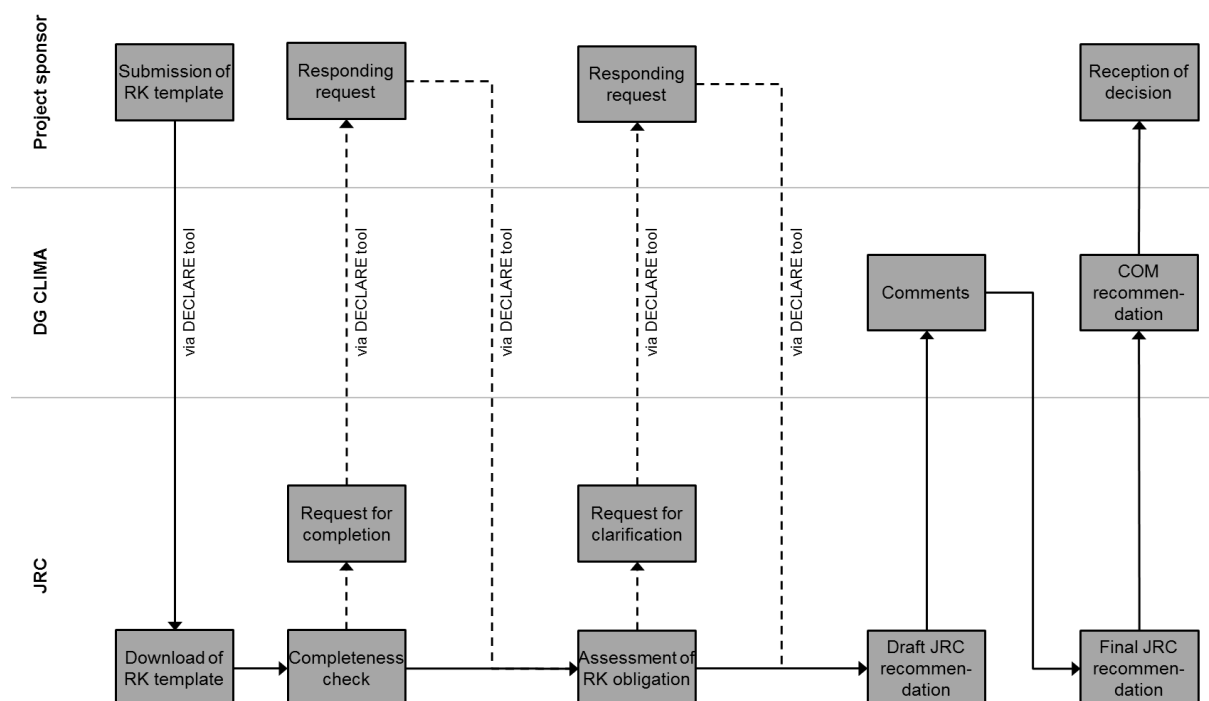


Figure 1 Overview of main processes to collect and assess relevant knowledge

At all times, the relevant knowledge disclosed will be handled with the appropriate level of confidentiality and security protection. Encrypted mail as well as secured and locked shared drives will be used in the whole process. All correspondence with project sponsors will be logged and archived in ARES. In Section 3, the schedule and timeline of the process are displayed in a Gantt chart.

2.1 Submission of RK template

Until 15 February each year, project sponsors (PS) have to submit to the European Commission relevant knowledge (RK) gained. The RK templates developed by DG CLIMA will be used. The completed RK templates will be submitted to DECLARE, an IT tool of the European Commission and registered in ARES.

So far, RK templates for 6 of the technology categories have been prepared and sent out to Member States for comments (highlighted in green in Table 1). They cover all projects from the first round of calls. The other RK templates will be updated and sent out for feedback from stakeholders in future, if needed. The RK templates developed and updated so far are available in Appendix 1.

Table 1 Overview of RK templates by technology category

Technology category	RK template
<i>Carbon capture and storage (CCS)</i>	
Power generation pre-combustion 250 MW	RK/CCS/PRE
Power generation post-combustion 250 MW	RK/CCS/POS
Power generation oxyfuel 250 MW	RK/CCS/OXY
Industrial applications	RK/CCS/IND

Technology category	RK template
<i>Renewable Energy (RES)</i>	
Bioenergy	RK/RES/BIO a/b/c/d/e/f/g/h/i
Concentrated solar power	RK/RES/CSP a/b/c/d/e
Photovoltaics	RK/RES/PV a/b/c
Geothermal	RK/RES/GEO a/b/c/d
Wind	RK/RES/WIN a/b/c/d/e/f
Ocean	RK/RES/OCN a/b/c
Hydropower	RK/RES/HYD
Distributed Renewable Management	RK/RES/DRM a/b/c
Template prepared and sent out for comments from PS and MS	
Will be developed only when one or more projects in this category will be selected for funding	

2.2 Download of completed RK template

After 15 February each year, the JRC will download the completed RK templates from DECLARE. If the IT tool is not operational for the 2014 KS cycle, DG CLIMA can provide the templates via ARES and encrypted mail. IET will have an IT expert on stand-by to address technical IT issues in cooperation with the DECLARE team if needed.

The RK templates will be stored in a secured shared drive. The RK templates will be downloaded by the JRC or provided by DG CLIMA by 22 February each year.

2.3 Completeness check

After download of the completed RK template, the JRC will check that all information requested has been provided. The completeness check includes a quick screening for obvious errors. The completeness check is a desk-based review. It will be performed by the technology expert(s) selected from the JRC expert evaluation team, using the checklists presented in Appendix 2. The RK submission is considered complete if each question of the template is answered and the requirements described in the RK template regarding the level of detail are met.

The results of the check including the completion rate of the RK submission will be logged using Appendix 2 and the summary template (Appendix 3) will be filled in. The completeness check will be concluded by end of February each year. If the submission is incomplete, the JRC will prepare a request for completion to the project sponsor (Section 2.4).

2.4 Request for completion

JRC will ask the project sponsor for an update and completion of the template if the submission is considered incomplete or if there are obvious errors. The request for completion will be prepared by the technology expert who has performed the completeness check using the template in Appendix 4.

The request will then be sent by the JRC coordinator to the project sponsor including a deadline for receiving a full and complete response. The typical deadline should be 5 working days. The request will be sent out via DECLARE. If the DECLARE tool is not available yet, encrypted email will be used. The correspondence will be registered in ARES.

2.5 Assessment of RK obligation

The assessment whether the project sponsor has met the knowledge sharing requirements will be performed in two steps.

First, one or two experts from the JRC expert evaluation team will assess independently the RK provided by the project sponsor. The experts will be chosen on the basis of their knowledge, experience and independence from the project. One expert can assess all relevant knowledge submitted by a project or only specific sections based on his/her experience. The assessment will be desk-based and each technology expert will enter the semi-quantitative assessment score (based on the three assessment criteria clarity, comprehensiveness and technical plausibility) regarding the submission using a checklist (Appendix 5). If the submission contains unclear or unsatisfactory answers, the JRC will prepare a request for clarification to the project sponsor (Section 2.6). The experts will state whether they consider the knowledge sharing requirements have been met for each section and sub-section they have evaluated and they will summarise the findings in a statement of half a page taking into account the answer of the project sponsor, if applicable.

Second, the views of the experts will be collected and a consensus position will be developed, when needed. Based on the consensus, an overall recommendation and comments will be compiled (Section 2.7).

The RK submission is considered satisfactory if each question of the template is answered in a clear and comprehensive manner and the requirements described in the RK template regarding the level of detail are met. In addition, the overall assessment score in the checklist should be not lower than 80 %. The RK submission is considered unsatisfactory if there have been issues flagged to the project sponsor in the request for clarification and the project sponsor did not give an appropriate and comprehensive answer or if the overall assessment score is lower than 80 %.

All information shared with the experts from the evaluation team will be sent using encrypted mail and protected shared drives.

2.6 Request for clarification

JRC will ask the project sponsor for clarification if the submission is considered insufficient or unclear. The technology expert will prepare the request using the standard template included in Appendix 6.

The request will then be sent by the JRC to the project sponsor including a deadline for receiving a full and complete response. The typical deadline should be 5 working days. The project sponsor will be granted an extension of the deadline by 5 more working days upon request in order to accommodate for complex issues. The request will be signed by the Head of Unit of F.06 and sent out via DECLARE. If the DECLARE tool is not available yet, encrypted email will be used. The correspondence will be registered in ARES.

The additional information provided will be assessed by the expert evaluation team as described in Section 2.5 within 5 working days.

2.7 Recommendation

A draft JRC recommendation for each individual project will be sent to DG CLIMA using the template in Appendix 7 by 30 April each year. The recommendation will include a short half-page summary report and an overall recommendation as to whether the project sponsor has met the knowledge sharing requirements. In addition, the recommendation will also state the completion rate of the RK submission based on the completeness check (Section 2.3) and the assessment score based on the RK assessment (Section 2.5).

DG CLIMA will provide feedback to the JRC within 5 working days. The final JRC recommendation incorporating the comments received will then be sent to DG CLIMA by 15 May each year. The recommendation of the JRC will be non-binding for DG CLIMA who will retain sole responsibility for decisions on disbursement of NER 300 funds.

3 Schedule and JRC-DG CLIMA interactions

The schedule and timeline of the RK assessment is shown in Figure 2. The completeness check shall be finalised by the end of February each year and the assessment of the RK obligation by mid of April. A draft recommendation will be sent by the end of April so that the entire process is completed by the 15 May each year.

The total person effort per project will be 3 person-days at maximum. This excludes any re-evaluation of initially incomplete/unclear submissions if needed (2 person-days per project).

Process	February				March				April				May				June	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Submission of RK template																		
Download of completed RK template																		
Completeness check																		
Assessment of RK obligation																		
Assessment of non-disclosure following SLBI 8e																		
Recommendation																		
Deliverables	D1.2.1								D1.2.2 Draft				D1.2.2 Final				D1.2.3	
Contacts and meetings ¹⁾	C	C	C	C	C	C	C	M	C	C	C	C	C	C				
1) C: telephone call, M: Meeting (or VC)																		

Figure 2 Annual time schedule for processes, deliverables and contacts/meetings

3.1 Deliverables

Three deliverables are due each year during the assessment process:

- D1.2.1: A report no longer than two pages outlining the status of project vis-à-vis their obligation to submit relevant knowledge (end February);
- D1.2.2: Annual report including key aspects of the methodology and lessons learnt, together with a reasoned recommendation for each project (draft 30 April, final 15 May);
- D1.2.3: Archive of correspondence (ARES, DECLARE documents) between JRC and project sponsors/Member States (31 May).

3.2 JRC-DG CLIMA interactions

JRC and DG CLIMA will interact closely throughout the process, so as to ensure that DG CLIMA is in a position to authorise all the decisions to be taken on time. JRC and DG CLIMA will hold a weekly phone call from 15 February to 15 May each year to ensure a strict monitoring of the knowledge sharing process and to address any issue in a timely fashion.

A mid-term meeting or video-conference will take place each year on either the last week of March or first of April, to make sure that the JRC and DG CLIMA are aligned and to discuss any potential issue arising from the KS process. DG CLIMA will organise this meeting.

Appendices

Appendix 1 RK templates

The RK templates are provided as separate files. They will be available for download at:
http://ec.europa.eu/clima/funding/ner300-1/index_en.htm.

Appendix 2 Checklists for completeness check

The checklists are provided as separate file. They will be available for download at:
http://ec.europa.eu/clima/funding/ner300-1/index_en.htm.

Appendix 3 Summary template for completeness check

Summary of completeness check	
Project sponsor	
Project name	
RK form	
Date RK received	
	Complete Comments
General Project Information	YES/NO
Contact details	YES/NO
A1 Technical Set-up and Performance (L1)	YES/NO
A2 Technical Set-up and Performance (L2)	YES/NO
B Cost levels (L1 and L2)	YES/NO
C1 Project Management (L1)	YES/NO
C2 Project Management (L2)	YES/NO
D Environmental Impact (L1 and L2)	YES/NO
E Health and Safety (L1 and L2)	YES/NO
Overall outcome of the completeness check	Request for completion needed YES/NO
	<i>Summary of the completeness check including completion rate</i>
Date	Signature

Appendix 4 Template for request for completion

<p>Request for completion</p> <p>Dear Sir or Madam,</p> <p>we have performed an initial check of your RK submission for the year <i>[to be inserted before sending to project sponsor]</i> concerning completeness. We do have a number of questions that are presented below. We would very much appreciate if you could respond to our questions not later than <i>[to be inserted before sending to project sponsor]</i> using the templates below. Please send your answer back to <i>[to be inserted before sending to project sponsor]</i>.</p> <p>The nature and extent of information provided in response to the request for completion will be considered, and in particular whether it responds adequately to the questions raised.</p> <p>We would like to thank you in advance for your collaboration. If you have any questions, please do not hesitate to contact us.</p> <p>Kind regards,</p> <p><i>Name (to be inserted before sending to project sponsor)</i></p>
--

Request for completion	
Project name	<i>(to be filled in before sending to project sponsor)</i>
Date issued	<i>(to be filled in before sending to project sponsor)</i>
Response due by	<i>date, time (to be filled in before sending to project sponsor)</i>
<p>Please use a separate table for each clarification question</p>	
Completion question	<i>Number (to be filled in before sending to project sponsor)</i>
Question relates to section	<i>Number (to be filled in before sending to project sponsor)</i>
Question	<i>(to be filled in before sending to project sponsor)</i>
Answer project sponsor	

Appendix 5 Checklist for assessment of RK submission

The checklists are provided as separate file. They will be available for download at:
http://ec.europa.eu/clima/funding/ner300-1/index_en.htm.

Appendix 6 Template for request for clarification

<p>Request for clarification</p> <p>Dear Sir or Madam,</p> <p>we have performed an initial check of your RK submission for the year <i>[to be inserted before sending to project sponsor]</i> concerning clarity. We do have a number of questions that are presented below. We would very much appreciate if you could respond to our questions not later than <i>[to be inserted before sending to project sponsor]</i> using the templates below. In case you consider the questions being of a very complex nature, please contact us to ask for an extension of the deadline by 5 more working days. Please send your answer back to <i>[to be inserted before sending to project sponsor]</i>.</p> <p>The nature and extent of information provided in response to the request for clarification will be considered, and in particular whether it responds adequately to the clarification questions.</p> <p>We would like to thank you in advance for your collaboration. If you have any questions, please do not hesitate to contact us.</p> <p>Kind regards,</p> <p><i>Name (to be inserted before sending to project sponsor)</i></p>

Request for clarification	
Project name	<i>(to be filled in before sending to project sponsor)</i>
Date issued	<i>(to be filled in before sending to project sponsor)</i>
Response due by	<i>date, time (to be filled in before sending to project sponsor)</i>
<p>Please use a separate table for each clarification question</p>	
Clarification question	<i>Number (to be filled in before sending to project sponsor)</i>
Question relates to section	<i>Number (to be filled in before sending to project sponsor)</i>
Question	<i>(to be filled in before sending to project sponsor)</i>
Answer project sponsor	

Appendix 7 Template for reasoned recommendation

Summary of the assessment of relevant knowledge submitted	
Project sponsor	
Project name	
Technology & subcategory	
	<div>RK requirements met</div> <div>Comments (if applicable)</div>
Technical set-up and performance	Yes/No
Cost levels	Yes/No
Project Management	Yes/No
Environmental impact	Yes/No
Health and Safety	Yes/No
Overall outcome	<div>Yes/No</div> <div>Summary report on the assessment, including issues raised to consider and remaining points of clarification, completion rate and assessment score</div>

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Abstract

NER 300 is an EU funding programme for the demonstration of carbon capture and storage (CCS) and innovative renewable energy (RES) technologies at the pre-commercial stage. Knowledge sharing requirements are built into the legal basis of the programme as a critical tool to lower risks in bridging the transition to large-scale production of innovative renewable energy and CCS deployment. Projects have to submit annually to the European Commission relevant knowledge gained. The European Commission assesses the relevant knowledge with a view to establishing whether the project has adequately complied with its obligations. This report presents the methodology for the assessment of knowledge sharing obligations.

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